CLAIMS

We Claim:

1	1.	A data structure for transferring data between a hub and a connected remote	
2	node,	node, said data structure comprising:	
3		a preamble for synchronizing the remote node to the hub;	
4 .		a control bus status field for indicating status to the remote node of a control	
5	bus at	bus at said hub;	
6		a hub control field for exchanging message control information between the	
7	remote	remote node and the hub;	
8		a control data field for exchanging control data information between the	
9	remote	remote node and the hub; and	
10		a plurality of data fields for transferring data between the remote node and	
11	the hu	the hub synchronized with other nodes by a frame clock.	
1	2.	A data structure as in claim 1, wherein communication between the	
2	conne	connected node and the hub is a serial transmission and the preamble includes a	
3	string	string of alternating ones and zeros.	
1	3.	A serial data structure as in claim 2, wherein the string of alternating ones	
2	and ze	and zeros is of sufficient length to extract a data transmission clock.	
1	4.	A serial data structure as in claim 3, wherein the string of alternating ones	
2	and ze	eros is of a sufficient length to synchronize a phase locked loop.	
1	5.	A serial data structure as in claim 4, wherein the preamble provides	
2	inform	nation for extracting the frame clock.	
1	6.	A serial data structure as in claim 5, wherein the preamble is three bytes	
2	wide.		

5569-69492 -26-

- 7. A data structure as in claim 1, wherein the hub control field is a single byte
- wide, each remote node corresponding with the corresponding connected hub port
- 3 through the hub control field.
- 1 8. A data structure as in claim 7, wherein each hub message between any said
- 2 hub port and a corresponding said connected remote node is four bytes long.
- 1 9. A data structure as in claim 8, wherein each hub message includes an
- 2 attention field, a command field, a channel field and a value field.
- 1 10. A data structure as in claim 9, wherein when the attention field is all ones, an
- 2 indication is being provided that a hub message is beginning to be sent.
- 1 11. A data structure as in claim 9, wherein the channel field includes a channel
- 2 number and an indication of whether a channel identified by said channel number is
- a listening channel or a source channel.
- 1 12. A data structure as in claim 9, wherein the command field includes a
- 2 command selected from the group of commands including a do nothing command, a
- 3 set channel value command, a get channel value command, an acknowledge message
- 4 and an error indication.
- 1 13. A data structure as in claim 1, wherein the control data field is a single byte
- wide and each communications packet between the hub and a connected remote
- node includes a portion of a control message for control messaging between peers in
- 4 said peer-to-peer network.
- 1 14. A control data structure as in claim 1, wherein the plurality of data fields
- 2 includes an intercom data field and a plurality of left and right audio fields.

5569-69492 -27-

- 1 15. A data structure as in claim 14, wherein the intercom field is twelve bits
- 2 long.
- 1 16. A data structure as in claim 15, wherein each of the left and right audio fields
- 2 is eighteen bits long.
- 1 17. A data structure as in claim 16, wherein the data structure includes four left
- 2 and right audio channels corresponding to four stereo audio channels.

-28-